

The shaft 106, to which the nozzles 100a and 100b are provided, can be vertically moved by elevating means, e.g., a handle 108; the shaft 106 can be horizontally moved by moving means, e.g., a motor 110.

The cleaning device shown in Fig. 1 is capable of cleaning the abrasive faces of the abrasive plates 20 and 30. The cleaning device shown in Fig. 1 inserts the brushes 102 into a space between the abrasive faces of the rotating abrasive plates 20 and 30, which are mutually faced. The ends of the brushes 102 simultaneously contact the abrasive faces, and the pressurized water, whose pressure is about 50-100 atm., is jetted toward the abrasive faces from the nozzles 100a and 100b, which are also inserted in the space together with the brushes 102. The nozzles 100a and 100b jetting the water are moved along the abrasive faces so as to remove abraded dusts, etc. deposited in discharging grooves 12 and 16 of the abrasive faces.

When the abrasive faces of the abrasive plates 20 and 30 are cleaned, the nozzles 100a and 100b are respectively located in spaces, each of which is formed by the brush 102 and the abrasive face to be cleaned, so that the nozzles 100a and 100b jet the water in the spaces without scattering the water outside.

The cleaning device shown in Fig. 1 has a shaft 11 and the brush 18, which is provided to a front end of the shaft 11. The brush 18 can move to and away from the upper abrasive plate 20. The brush ¹⁸~~28~~ can contact an outer circumferential face of the upper abrasive plate 20. ^A

The brush 18 is used as closing means as shown in Fig. 2. When the edge portions of the abrasive plates 20 and 30 are cleaned, the nozzles 100a and 100b are moved to the outer edges of the abrasive plates 20 and 30. Then gaps are formed between the outer edges of the abrasive plates 20 and 30 and inner edges of the brushes 102.

The gap between the outer edges of the abrasive plate 20 and the inner edge of the brush 102 for cleaning the upper abrasive plate 20 is

of the brush 34 is capable of contacting the abrasive face of the abrasive plate 20 or 30 to wash the abrasive face. Further, the brush 34 defines a range of scattering the water jetted from the nozzle 35. Since the water can flow out from the brushes 34, no water is stored in a space enclosed by the brush 34.

A control valve 37, e.g., an electromagnetic valve, is provided to a mid part of the pipe 33 so as to control water supply to the nozzle 35.

A shaft 17 is extended and retracted by an air cylinder unit 19, and the brush 18 is provided to a front end of the shaft 17. By actuating the air cylinder unit 19, the brush 18 can be moved to and away from the outer circumferential face of the upper abrasive plate 20.

RC The motors 28 and 45 of the moving unit ²⁶~~28~~, the pump 38, the air cylinder units 19 and 24, and the control valve 37 are controlled by a control unit 43.

In the case of cleaning the abrasive faces of the abrasive plates 20 and 30 of the lapping machine shown in Fig. 10, firstly the cylinder unit 22 of the lapping machine is actuated so as to upwardly move the upper abrasive plate 20 and widen the clearance between the abrasive plates 20 and 30, which are not rotated.

Then, the control unit 43 drives the motors 28 and 45 and actuates the cylinder unit 24 so as to insert the nozzle section 32 into the wide clearance between the abrasive plates 20 and 30 and turn the nozzle section 32 to head to the lower abrasive face of the upper abrasive plate 20. With this action, the water can be jetted toward the lower abrasive face of the upper abrasive plate 20.

Successively, the abrasive plates 20 and 30 are rotated, and the water is jetted toward the lower abrasive face of the rotating upper abrasive plate 20, so that the lower abrasive face of the upper abrasive plate 20 can be cleaned. After the lower abrasive face of the upper abrasive plate 20 is

cleaned, the nozzle section 32 is turned to head to the upper abrasive face of the lower abrasive plate 30.

Then, the upper abrasive face of the lower abrasive plate 30 is cleaned by the water jetted from the nozzle 35.

When the abrasive face of the rotating upper abrasive plate 20 is cleaned, the control unit 43 drives the motor 28 of the moving unit 26 and actuates the cylinder unit 24 so as to make the brush 34 of the nozzle section 32 contact the outer edge part of the rotating upper abrasive plate 20. Then,

the control unit 43 drives the pump 38 and opens the valve 37 so as to jet the water from the nozzle 35 toward the abrasive face of the upper abrasive plate 20. Proper temperature of the water for easily wash the abrasive face is 10-90° C, preferably about 40 ° C; proper pressure of the jetted water at an outlet of the pump 38 is 10.79 MPa or more, preferably 11.76 MPa or more.

Note that, amount of jetting water can be reduced by increasing water pressure.

While the nozzle section 32 cleans the abrasive face of the upper abrasive plate 20, the control unit 43 drives the motor 28 so as to move the nozzle section 32 jetting the water from the outer edge portion of the upper abrasive plate 20 toward the center thereof.

When the nozzle section 32 reaches the center, the control unit 43 drives the motor 28 so as to move the nozzle section 32, whose brush 34 is contacting the abrasive face of the upper abrasive plate 20 and whose nozzle 35 is jetting the water thereto, toward the outer edge of the upper abrasive plate 20.

When the nozzle section 32 approaches to the outer edge of the upper abrasive plate 20, a gap is formed between the outer edge of the upper abrasive plate 20 and an inner edge of the brush 34. At that time, the control unit 43 actuates the cylinder unit 19 so as to make the brush 18 contact the